Expert Forum for producers and user of climate change-related statistics
Geneva, 2-4 October 2018

Disaster-related Statistics Framework

- a new international guideline

DISASTER-RELATED STATISTICS FRAMEWORK (DRSF)

Expert Group on Disaster-related Statistics in Asia and the Pacific

ESCAP

UNITED NATIONS
ESCAP
Economic and Social Commission for Asia and the Pacific

Statistics Division
http://www.unescap.org/our-work/statistics

Context

UN World Conference on Disaster Risk Reduction
2015 Sendai Japan

Global Initiatives

Global Initiatives

SUSTAINABLE DEVELOPMENT GOALS

PARIS2015
COP21-CMP11

National Planning
- Disaster Risk Reduction
- Climate Change Strategy
- Sustainable Development Planning

National, Regional, Local Risk Assessments

Post Disaster Assessments

Disaster Response & Civil Protection

Disaster-related statistics

Disaster Management Agencies

National Statistics Offices & other official Sources of relevant data

UNITED NATIONS
ESCAP
Economic and Social Commission for Asia and the Pacific

Statistics Division
http://www.unescap.org/our-work/statistics

1

Aim

National DRR Strategies

PARIS2015
UN CLIMATE CHANGE CONFERENCE
COP21·CMP11

Sendai Framework
for Disaster Risk Reduction
2015 - 2030

Policy context

Institutional environment

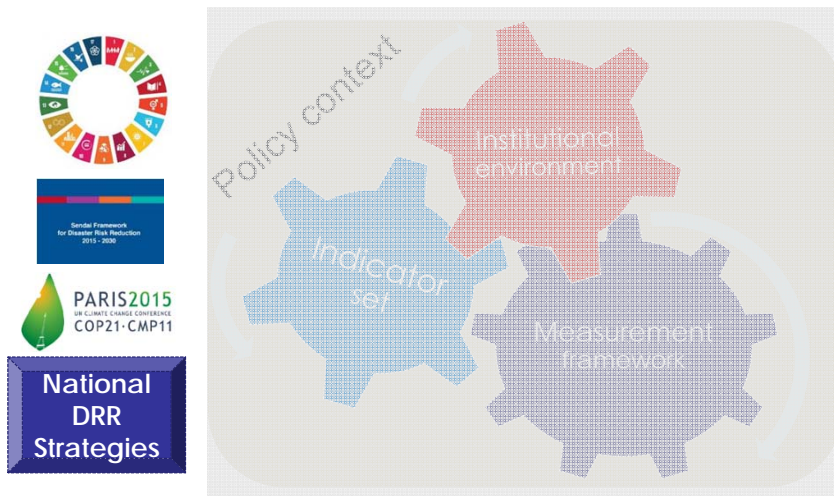Indicator set

Measurement framework

Disaster-Related Statistics Framework (DRSF)

Process

Expert group: Official statisticians & disaster information experts

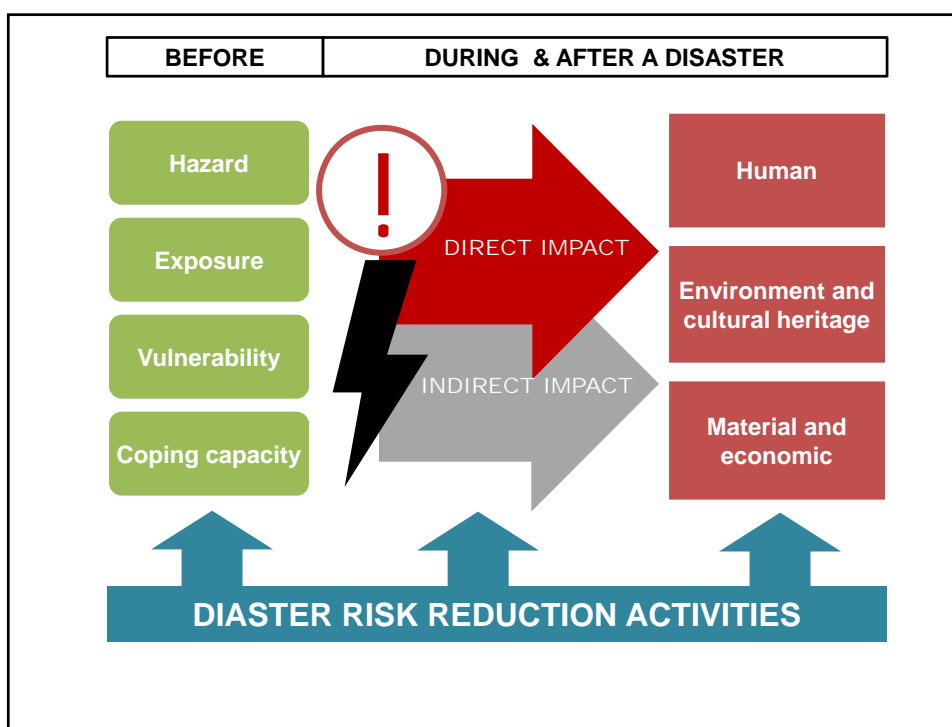Improvements to data & knowledge on disaster risk and disaster impacts

harmonization of methods

Bridging disaster and risk management with socio-economic statistics

Result

- **Key concepts for measurement**
  - Occurrence and risks
  - Impacts
  - DRR activities

Link to **DRSF**

- **Guidelines for implementation**
  - Implementation steps
  - Basic range of data and statistics (tables)
  - Definitions and classifications
  - Collection and analysis of statistics in the DRM cycle

UNITED NATIONS
ESCAP
Economic and Social Commission for Asia and the Pacific

Statistics Division
http://www.unescap.org/our-work/statistics

BEFORE	DURING & AFTER A DISASTER

Hazard

Exposure

Vulnerability

Coping capacity

!

DIRECT IMPACT

INDIRECT IMPACT

Human

Environment and cultural heritage

Material and economic

DIASTER RISK REDUCTION ACTIVITIES

Disasterrisk assessment

Risk = f(Exposure, Vulnerability, Coping Capacity)

* Each element is measurable and NSOs/official data have a crucial role to play

---

Hazard ➡ ⬅ Exposure

Data mostly from mapping and environment agencies:
- Digital Elevation model (DEM)
- Land cover; built-up areas; soil data;
- Footprint of historical hazards
- Etc.

Data mostly from NSOs:
- Population (no. or density) by location
- Basic demographic and social data (for geo disaggregation)
- Housing data
- Admin data on schools, hospitals, tourism, etc.
- Economic activity (e.g. 'heat map')

Example use: Post disaster assessment

- Pilot: Bangkok and surrounding areas; built up areas combined with census data in high resolution grid

Src.: Pilot results, calculated by ESCAP based on Global Urban Footprint (DLR), CCI Land Cover (ESA), and Census(Thai NSO)

Disaster Risk Management Cycle
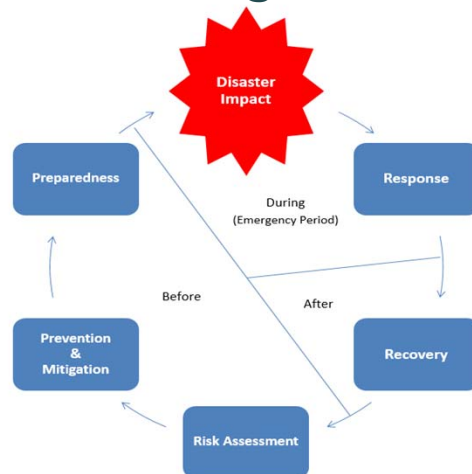
Src.: adapted from Thailand Dept. of Disaster Preparedness Management (DDPM)

What's next

Activities
- Review and endorsement of the DRSF by governments
- Continuation of technical work

Mechanisms
- UN Statistical Commission
- ESCAP Committees on Statistics and DRR
- The Expert Group
- Global Partnership on Disaster-related Statistics

UNITED NATIONS
ESCAP
Economic and Social Commission for Asia and the Pacific

Statistics Division
http://www.unescap.org/our-work/statistics

Thank You

Image src: Yavuz Sariyilidiz/shutterstock

UNITED NATIONS
ESCAP
Economic and Social Commission for Asia and the Pacific

Statistics Division
http://www.unescap.org/our-work/statistics